



<110> Sliwowski, Mark X.

<120> TREATING PROSTATE CANCER WITH ANTI-ErbB2 ANTIBODIES

<130> 39766-0142A

<140> US 09/602,800

<141> 2000-06-23

<150> US 60/141,315

<151> 1999-06-25

<160> 22

<210> 1

<211> 107

<212> PRT

<213> Mus musculus

<400> 1

Asp Thr Val Met Thr Gln Ser His Lys Ile Met Ser Thr Ser Val
1 5 10 15

Gly Asp Arg Val Ser Ile Thr Cys Lys Ala Ser Gln Asp Val Ser
20 25 30

Ile Gly Val Ala Trp Tyr Gln Gln Arg Pro Gly Gln Ser Pro Lys
35 40 45

Leu Leu Ile Tyr Ser Ala Ser Tyr Arg Tyr Thr Gly Val Pro Asp
50 55 60

Arg Phe Thr Gly Ser Gly Ser Gly Thr Asp Phe Thr Phe Thr Ile
65 70 75

Ser Ser Val Gln Ala Glu Asp Leu Ala Val Tyr Tyr Cys Gln Gln
80 85 90

Tyr Tyr Ile Tyr Pro Tyr Thr Phe Gly Gly Gly Thr Lys Leu Glu
95 100 105

Ile Lys

<210> 2

<211> 119

<212> PRT

<213> Mus musculus

<400> 2

Glu Val Gln Leu Gln Gln Ser Gly Pro Glu Leu Val Lys Pro Gly
1 5 10 15

Thr Ser Val Lys Ile Ser Cys Lys Ala Ser Gly Phe Thr Phe Thr
20 25 30

Asp Tyr Thr Met Asp Trp Val Lys Gln Ser His Gly Lys Ser Leu
35 40 45

Glu Trp Ile Gly Asp Val Asn Pro Asn Ser Gly Gly Ser Ile Tyr
50 55 60

Asn Gln Arg Phe Lys Gly Lys Ala Ser Leu Thr Val Asp Arg Ser
65 70 75
Ser Arg Ile Val Tyr Met Glu Leu Arg Ser Leu Thr Phe Glu Asp
80 85 90
Thr Ala Val Tyr Tyr Cys Ala Arg Asn Leu Gly Pro Ser Phe Tyr
95 100 105
Phe Asp Tyr Trp Gly Gln Gly Thr Thr Leu Thr Val Ser Ser
110 115

<210> 3
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> Consensus Amino Acid Sequence

<400> 3
Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val
1 5 10 15
Gly Asp Arg Val Thr Ile Thr Cys Lys Ala Ser Gln Asp Val Ser
20 25 30
Ile Gly Val Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys
35 40 45
Leu Leu Ile Tyr Ser Ala Ser Tyr Arg Tyr Thr Gly Val Pro Ser
50 55 60
Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile
65 70 75
Ser Ser Leu Gln Pro Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln
80 85 90
Tyr Tyr Ile Tyr Pro Tyr Thr Phe Gly Gln Gly Thr Lys Val Glu
95 100 105
Ile Lys

<210> 4
<211> 119
<212> PRT
<213> Artificial Sequence

<220>
<223> Consensus Amino Acid Sequence

<400> 4
Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly
1 5 10 15
Gly Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Thr
20 25 30
Asp Tyr Thr Met Asp Trp Val Arg Gln Ala Pro Gly Lys Gly Leu
35 40 45

Glu Trp Val Ala Asp Val Asn Pro Asn Ser Gly Gly Ser Ile Tyr
50 55 60
Asn Gln Arg Phe Lys Gly Arg Phe Thr Leu Ser Val Asp Arg Ser
65 70 75
Lys Asn Thr Leu Tyr Leu Gln Met Asn Ser Leu Arg Ala Glu Asp
80 85 90
Thr Ala Val Tyr Tyr Cys Ala Arg Asn Leu Gly Pro Ser Phe Tyr
95 100 105
Phe Asp Tyr Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
110 115

<210> 5
<211> 107
<212> PRT
<213> Homo sapiens

<400> 5
Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val
1 5 10 15
Gly Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Ser Ile Ser
20 25 30
Asn Tyr Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys
35 40 45
Leu Leu Ile Tyr Ala Ala Ser Ser Leu Glu Ser Gly Val Pro Ser
50 55 60
Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile
65 70 75
Ser Ser Leu Gln Pro Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln
80 85 90
Tyr Asn Ser Leu Pro Trp Thr Phe Gly Gln Gly Thr Lys Val Glu
95 100 105
Ile Lys

<210> 6
<211> 119
<212> PRT
<213> Homo sapiens

<400> 6
Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly
1 5 10 15
Gly Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser
20 25 30
Ser Tyr Ala Met Ser Trp Val Arg Gln Ala Pro Gly Lys Gly Leu
35 40 45
Glu Trp Val Ala Val Ile Ser Gly Asp Gly Gly Ser Thr Tyr Tyr
50 55 60

Ala Asp Ser Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser
65 70 75
Lys Asn Thr Leu Tyr Leu Gln Met Asn Ser Leu Arg Ala Glu Asp
80 85 90
Thr Ala Val Tyr Tyr Cys Ala Arg Gly Arg Val Gly Tyr Ser Leu
95 100 105
Tyr Asp Tyr Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
110 115

<210> 7
<211> 10
<212> PRT
<213> Mus musculus

<220>
<221> VARIANT
<222> 10
<223> Xaa = D or S

<400> 7
Gly Phe Thr Phe Thr Asp Tyr Thr Met Xaa
1 5 10

<210> 8
<211> 17
<212> PRT
<213> Mus musculus

<400> 8
Asp Val Asn Pro Asn Ser Gly Gly Ser Ile Tyr Asn Gln Arg Phe
1 5 10 15

Lys Gly

<210> 9
<211> 10
<212> PRT
<213> Mus musculus

<400> 9
Asn Leu Gly Pro Ser Phe Tyr Phe Asp Tyr
1 5 10

<210> 10
<211> 11
<212> PRT
<213> Mus musculus

<400> 10
Lys Ala Ser Gln Asp Val Ser Ile Gly Val Ala
1 5 10

<210> 11
<211> 7
<212> PRT
<213> Mus musculus

<220>

<221> VARIANT

<222> 5

<223> Xaa = R or L

<220>

<221> VARIANT

<222> 6

<223> Xaa = Y or E

<220>

<221> VARIANT

<222> 7

<223> Xaa = T or S

<400> 11

Ser	Ala	Ser	Tyr	Xaa	Xaa	Xaa
1				5		

<210> 12

<211> 9

<212> PRT

<213> Mus musculus

<400> 12

Gln	Gln	Tyr	Tyr	Ile	Tyr	Pro	Tyr	Thr
1				5				

<210> 13

<211> 645

<212> PRT

<213> Homo sapiens

<400> 13

Met	Glu	Leu	Ala	Ala	Leu	Cys	Arg	Trp	Gly	Leu	Leu	Leu	Ala	Leu
1				5					10					15

Leu	Pro	Pro	Gly	Ala	Ala	Ser	Thr	Gln	Val	Cys	Thr	Gly	Thr	Asp
			20						25					30

Met	Lys	Leu	Arg	Leu	Pro	Ala	Ser	Pro	Glu	Thr	His	Leu	Asp	Met
			35						40					45

Leu	Arg	His	Leu	Tyr	Gln	Gly	Cys	Gln	Val	Val	Gln	Gly	Asn	Leu
			50						55					60

Glu	Leu	Thr	Tyr	Leu	Pro	Thr	Asn	Ala	Ser	Leu	Ser	Phe	Leu	Gln
			65						70					75

Asp	Ile	Gln	Glu	Val	Gln	Gly	Tyr	Val	Leu	Ile	Ala	His	Asn	Gln
			80						85					90

Val	Arg	Gln	Val	Pro	Leu	Gln	Arg	Leu	Arg	Ile	Val	Arg	Gly	Thr
			95						100					105

Gln	Leu	Phe	Glu	Asp	Asn	Tyr	Ala	Leu	Ala	Val	Leu	Asp	Asn	Gly
			110						115					120

Asp	Pro	Leu	Asn	Asn	Thr	Thr	Pro	Val	Thr	Gly	Ala	Ser	Pro	Gly
			125						130					135

Gly	Leu	Arg	Glu	Leu	Gln	Leu	Arg	Ser	Leu	Thr	Glu	Ile	Leu	Lys
			140						145					150

Gly Gly Val Leu	Ile Gln Arg Asn Pro	Gln Leu Cys Tyr Gln Asp	155	160	165
Thr Ile Leu Trp	Lys Asp Ile Phe His	Lys Asn Asn Gln Leu Ala	170	175	180
Leu Thr Leu Ile	Asp Thr Asn Arg Ser	Arg Ala Cys His Pro Cys	185	190	195
Ser Pro Met Cys	Lys Gly Ser Arg Cys	Trp Gly Glu Ser Ser Glu	200	205	210
Asp Cys Gln Ser	Leu Thr Arg Thr Val	Cys Ala Gly Gly Cys Ala	215	220	225
Arg Cys Lys Gly	Pro Leu Pro Thr Asp	Cys Cys His Glu Gln Cys	230	235	240
Ala Ala Gly Cys	Thr Gly Pro Lys His	Ser Asp Cys Leu Ala Cys	245	250	255
Leu His Phe Asn	His Ser Gly Ile Cys	Glu Leu His Cys Pro Ala	260	265	270
Leu Val Thr Tyr	Asn Thr Asp Thr Phe	Glu Ser Met Pro Asn Pro	275	280	285
Glu Gly Arg Tyr	Thr Phe Gly Ala Ser	Cys Val Thr Ala Cys Pro	290	295	300
Tyr Asn Tyr Leu	Ser Thr Asp Val Gly	Ser Cys Thr Leu Val Cys	305	310	315
Pro Leu His Asn	Gln Glu Val Thr Ala	Glu Asp Gly Thr Gln Arg	320	325	330
Cys Glu Lys Cys	Ser Lys Pro Cys Ala	Arg Val Cys Tyr Gly Leu	335	340	345
Gly Met Glu His	Leu Arg Glu Val Arg	Ala Val Thr Ser Ala Asn	350	355	360
Ile Gln Glu Phe	Ala Gly Cys Lys Lys	Ile Phe Gly Ser Leu Ala	365	370	375
Phe Leu Pro Glu	Ser Phe Asp Gly Asp	Pro Ala Ser Asn Thr Ala	380	385	390
Pro Leu Gln Pro	Glu Gln Leu Gln Val	Phe Glu Thr Leu Glu Glu	395	400	405
Ile Thr Gly Tyr	Leu Tyr Ile Ser Ala	Trp Pro Asp Ser Leu Pro	410	415	420
Asp Leu Ser Val	Phe Gln Asn Leu Gln	Val Ile Arg Gly Arg Ile	425	430	435
Leu His Asn Gly	Ala Tyr Ser Leu Thr	Leu Gln Gly Leu Gly Ile	440	445	450
Ser Trp Leu Gly	Leu Arg Ser Leu Arg	Glu Leu Gly Ser Gly Leu	455	460	465

Ala Leu Ile His His Asn Thr His Leu Cys Phe Val His Thr Val
 470 475 480

Pro Trp Asp Gln Leu Phe Arg Asn Pro His Gln Ala Leu Leu His
 485 490 495

Thr Ala Asn Arg Pro Glu Asp Glu Cys Val Gly Glu Gly Leu Ala
 500 505 510

Cys His Gln Leu Cys Ala Arg Gly His Cys Trp Gly Pro Gly Pro
 515 520 525

Thr Gln Cys Val Asn Cys Ser Gln Phe Leu Arg Gly Gln Glu Cys
 530 535 540

Val Glu Glu Cys Arg Val Leu Gln Gly Leu Pro Arg Glu Tyr Val
 545 550 555

Asn Ala Arg His Cys Leu Pro Cys His Pro Glu Cys Gln Pro Gln
 560 565 570

Asn Gly Ser Val Thr Cys Phe Gly Pro Glu Ala Asp Gln Cys Val
 575 580 585

Ala Cys Ala His Tyr Lys Asp Pro Pro Phe Cys Val Ala Arg Cys
 590 595 600

Pro Ser Gly Val Lys Pro Asp Leu Ser Tyr Met Pro Ile Trp Lys
 605 610 615

Phe Pro Asp Glu Glu Gly Ala Cys Gln Pro Cys Pro Ile Asn Cys
 620 625 630

Thr His Ser Cys Val Asp Leu Asp Asp Lys Gly Cys Pro Ala Glu
 635 640 645

<210> 14

<211> 18

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic Oligonucleotide Primer

<400> 14

ggacagcact gccagaga 18

<210> 15

<211> 22

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic Oligonucleotide Primer

<400> 15

caggtgatta caggccaagt ag 22

<210> 16

<211> 23

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic Oligonucleotide Probe

<400> 16

cctgggtgtg ccacagacct tca 23

<210> 17

<211> 21

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic Oligonucleotide Primer

<400> 17

tgaagttacc tccaggttgg t 21

<210> 18

<211> 23

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic Oligonucleotide Primer

<400> 18

agacacattc tgtccatttt caa 23

<210> 19

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic Oligonucleotide Probe

<400> 19

caagctgcaa agtgccttgc tcat 24

<210> 20

<211> 21

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic Oligonucleotide Primer

<400> 20

atgtatcaca gcctgtacct g 21

<210> 21

<211> 21

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic Oligonucleotide Primer

<400> 21

ttcttggtct cttcctcctt g 21

<210> 22

<211> 26

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic Oligonucleotide Probe

<400> 22

aggtctaaga ccaaggaagc acgcaa 26